



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/743,997	03/13/2001	William Henry Mengel	RCA-89130	1650

7590 03/10/2004
Joseph S Tripoli
Thomson Multimedia Licensing Inc
P O Box 5312
Princeton, NJ 08540

EXAMINER

NATNAEL, PAULOS M

ART UNIT	PAPER NUMBER
----------	--------------

2614

DATE MAILED: 03/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/743,997

Applicant(s)

MENGEL, WILLIAM HENRY

Examiner

Paulos M. Natnael

Art Unit

2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 December 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the claimed "inserting the OSD data into the analog video signal" in claim 9, must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claim 9 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

While the specification discloses that the MPEG Decoder 22 has OSD generator 24 attached to it and that the OSD generator 24 provides bit map capabilities ...and that video D/A converter 26 contains three digital-to-analog converters...which, in this case,

Art Unit: 2614

the video signal would also include any OSD data/information, illustrating the D/A converter as coming after the OSD is inserted in the digital signal, not into analog signal, claim 9 recites "inserting the OSD data into the analog video signal". Thus, Claim 9 is not enabling and the skilled in the art would not be able to make or use the invention as claimed without undue experimentation.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Sparks, U.S. Patent No. **6,034,738**.

Considering claim 1, Sparks discloses all claimed subject matter, note;

- a) receiving an analog video signal including non-video data formatted as OSD data, is met by the display device 300 through the A/V+OSD signal 103, Fig.2;
- b) detecting the non-video data formatted as OSD data, is met by the display 300 and the disclosure that "a signal selector 310, couples as is known, to video and

synchronizing processing circuitry, not shown, which in combination generate an image display.” (col. 8, lines 8-16)

c) extracting the detected non-video data from the analog signal, is also met by the display 300 and the disclosure that “a signal selector 310, couples as is known, to video and synchronizing processing circuitry, not shown, which in combination generate an image display,” (col. 8, lines 8-16) which inherently extracts the OSD data from the Audio/video signal, and transfers it to the display.

3. Claims **1-3, 5-8** are rejected under 35 U.S.C. 102(e) as being anticipated by Knox et al., U.S. Pat. No. 6,480,238.

Considering claim **1**,

a) receiving an analog video signal including non-video data formatted as OSD data, is met by the Display 190, Fig.1;

b) detecting the non-video data formatted as OSD data, is inherent in the Display 190, Fig.1, because without detecting the signal including the OSD data, the display would not be able to display the OSD as shown in Fig.3 which illustrates a displayed frame (background) and the OSD1 352 and OSD2 354 signals.

c) extracting the detected non-video data from the analog signal, is also inherent in the Display 190, Fig.1, because without detecting the signal including the OSD data, the display would not be able to display the OSD as shown in Fig.3 which illustrates a displayed frame (background) and the OSD1 352 and OSD2 354 signals.

Art Unit: 2614

Considering claim **2**, the claimed method of wherein the OSD data is inserted into the analog video signal during non-blanking portions, is met by the disclosure that "The OSD unit can be used to display a user defined bit map over any part of the displayable screen, independent of the size and location of the **active video** area." (col. 4, lines 64-66)

Considering claim **3**, the claimed method wherein the non-video data is control data, is met by the disclosure "Processor 130 performs various control functions, including but not limited to, providing control data to the video decoder 160 and OSD unit 150..." (col. 3, lines 11-14)

Considering claim **5**, the claimed method wherein the non-video data is contained in the digital video signal is met by the output of the output signal of the OSD 150, fig.1, which is a digital signal input to the D/A converter (DAC) 185.

Considering claim **6**, the claimed method wherein the non-video data is determined by the video receiver is met by the Control microprocessor which determines which data to send to the OSD 150, fig.1;

Considering claim **7**, the claimed method wherein the non-video data is displayable in an overscan region, is met by the disclosure that "The OSD unit can be used to display

a user defined bit map over any part of the displayable screen, independent of the size and location of the active video area.” (col. 4, lines 64-66)

Considering claim **8**, the claimed method wherein the non-video data is wherein the video receiver provides a sync signal to the external device, is met by the disclosure that “Horizontal and vertical sync signals are separated at a separator and then used to synchronize the reading functions from memory.” (col. 1, lines 42-48)

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims **4 and 9** are rejected under 35 U.S.C. 103(a) as being unpatentable over Knox et al., U.S. Pat. No. 6,480,238.

Considering claim **4**, the claimed method wherein the non-video data is information usually included in a blanking interval of an analog video signal.

Regarding claim 4, Knox doesn't specifically disclose that the non-video data is information usually included in a blanking interval of an analog video signal. However, Examiner takes Official Notice here in that it is notoriously well known in the art that a

non-video data or information would be included in the vertical blanking interval of the video signal, for example, and therefore, it would have been obvious to the skilled in the art at the time the invention was made to modify the system of Knox by including or providing the non-video data in the blanking interval of the analog video signal in order for the receiver to reliably extract the non-video data from the VBI and display or transmit the same to other devices within the system, so that the active video portion would be used for the main video signal.

Considering claim 9, Knox discloses the following claimed subject matter, note;

- a) receiving a digital signal is met by the bitstreams 110 and 130, (fig.2).
- b) converting the digital video signal to analog video signal, is met by DAC 185, fig.1.
- c) providing the non-video data signal to an OSD generator, is met by OSD unit 170, fig.1;
- d) formatting the non-video data signal as OSD data, is met by OSD Unit 170, fig.1;
- f) providing the analog signal including the non-video data signal formatted as OSD data to an external device, is met by DAC 185 which delivers the signal to the Display device.

Except of;

- e) inserting the OSD data into the analog video signal, is met by OSD ADDer 275, fig.2;

Regarding e), the OSD mixer 170 in fig.1 is a digital mixer. However, the Examiner takes Official Notice in that inserting OSD data into the analog video signal is

notoriously well known in the art and therefore, it would have been obvious to the skilled in the art at the time the invention was made to modify the system of Knox et al. by providing a DAC converter in the decoder 100 (in contrast to the DAC being outside the decoder) to convert the video signal into analog domain before adding the OSD data into the signal, so that the system of Knox is made more compact and able to save cost of the overall system.

Response to Arguments

Applicant's Arguments

- a) This is unlike the present claimed invention which is provided for receiving non-video data as OSD data for communication to an external device and receiving and processing the OSD data formatted as OSD data.

- b) The prevent claimed invention is no concerned with OSD data but only receiving non-video data formatted as OSD data for purposes of communication when it is not possible to communicate such non-video data by conventional means such as in the blanking interval of a video signal.

Examiner's Response

- a) Knox et al disclose a system 100 which receives digital bit streams 110 and 120 and OSD unit 150 which can be used to display a user defined bit map over any part of the

displayable screen, independent of the size and location of the active video area. (col. 4, lines 64-66) That clearly shows that the OSD bitstream is received in the processor 130 as non-video data designated as OSD data. The mixer mixes the OSD data with the video data and the D/A converter converts the signal into analog and outputs it to the display. In claim 1, the claim simply recites receiving an analog video signal including non-video data formatted as OSD data, which the display 190 receives the analog data including OSD data. Detection and extraction of the OSD data is inherently the function of the display 190. Therefore, the argument that Knox does not disclose the claim as claimed is utterly incomprehensive and unpersuasive.

b) the applicant is arguing something that is not found in the claims. The claims do not recite "OSD data for purposes of communication when it is not possible to communicate such non-video data by conventional means such as in the blanking interval of a video signal" Argument therefore is unpersuasive.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paulos M. Natnael whose telephone number is (703) 305-0019. The examiner can normally be reached on 9:00am - 5:30pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (703) 305-4795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2614

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Paulos Natnael
February 22, 2004

PNW


MICHAEL H. LEE
PRIMARY EXAMINER